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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/909,748

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Timothy David Forrester

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08/25/2004

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EXAMINER

CONTEE, JOY KIMBERLY

ART UNIT

PAPER NUMBER

2686

10

DATE MAILED: 08/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/909,748

Applicant(s)

FORRESTER

Examiner

Joy K Contee

Art Unit

2686

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 19-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 19-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

Applicant claims to disagree with rejections under 35 USC 102(e) and 35 USC 103(a) with respect to the originally filed claims 1-18; however, they have been canceled. Applicant has presented a new set of claims, claims 19-31, which are rejected below under 35 USC 102(b).

### *Claim Objections*

2. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not). Misnumbered claim 23 (the second one) must be renumbered 29. The claim has been examined on the merits of a corresponding system claim 23.

### *Claim Rejections - 35 USC § 112*

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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4. Claims 21 and 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim s 21 and 27 recite the limitation "the second first antenna circuit" in line 3 of the claim. There is insufficient antecedent basis for this limitation in the claim.

It is not clear as to what Applicant intends in the claim because of the aforementioned limitation. Examiner has not examined the claim on the merits.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 19,20,22 ,26 and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Aoki et al. (Aoki), U.S. Patent No. 5,535,430.

Regarding claims 19 and 26, Aoki discloses an antenna system (and method for providing reception in) a wireless communication device comprising:

a first antenna circuit (col. 7, lines 20-40);

a second antenna circuit (col. 7, lines 20-40);

a processor coupled to the first antenna circuit and to the second antenna circuit  
the processor configured to:

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11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joy K Contee whose telephone number is 703-308-0149. The examiner can normally be reached on M (alternating), T & Th, 5:30 a.m. to 2:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on 703-305-4379. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Joy Contee

August 23, 2004

  
CHARLES APPIAH  
PRIMARY EXAMINER

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operate the first antenna circuit to receive a first communication signal employing a first communication system mode (col. 12, lines 53-65);

monitor a second communication signal via the second antenna circuit, the second communication signal employing a second communication system mode different from the first communication system mode (col. 19, line 63 to col. 20, line 30);

handoff communication of the wireless communication device to the second communication signal mode based on the first communication signal and the second communication signal (col. 20, lines 32-48).

Regarding claims 20 and 26, Aoki discloses the antenna system and method of claims 19 and 26, respectively, wherein after the hand off, the processor operates the first antenna circuit to receive communication signal employing the second communication system mode (col. 20, lines 1-30).

Regarding claims 22 and 28, Aoki discloses the antenna system of claims 19 and 26, respectively, wherein the first communication signal and the second communication signal are combined for reception (col. 15, lines 25-34).

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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8. Claims 23 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aoki, in view of Standke et al. (Standke), U.S. Patent No. 6,694,150.

Regarding claims 23 and 29, Aoki discloses the antenna system of claims 19 and 26, but fails to explicitly disclose, wherein the first communication system mode operates in a separate frequency band from the second communication system mode.

In a similar field of endeavor, Standke discloses wherein the first communication system mode operates in a separate frequency band from the second communication system mode (col. 1, lines 10-49).

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify Aoki to include multiple frequency bands in order to expand the usage of modern wireless communication technologies.

9. Claims 24, 25, 30 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aoki, in view of Burdick et al., (Burdick), U.S. Patent No. 6,424,820.

Regarding claim 24 and 30, Aoki discloses the antenna system of claims 19 and 36, respectively, but fails to disclose wherein the first communication mode comprises a different multiple access arrangement from the second communication system mode.

In a similar field of endeavor, Burdick discloses wherein the first communication mode comprises a different multiple access arrangement from the second communication system mode (col. 51, lines 61-65).

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify Aoki to include multiple access systems for the purpose of utilizing modern wireless communication technologies.

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Regarding claims 25 and 31, Aoki discloses the antenna system according to claims 19 and 26, respectively, but fails to disclose wherein the second antenna of the second antenna circuit is disposed approximately orthogonally to the first antenna of the first antenna circuit.

Burdick discloses wherein a second antenna is disposed approximately orthogonally to the first antenna (col. 32, lines 33-43 and col. 34, lines 1-15).

At the time of the invention it would have been obvious to one of ordinary skill in the art to that Aoki would have used orthogonal spacing between the two antennas since it is known in this coupling is known in the art as taught by Burdick.

### ***Conclusion***

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.